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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,391

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Jonathon Leigh Napper

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EXAMINER

CHOJNACKI, MELLISSA M

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,391	<b>Applicant(s)</b> NAPPER ET AL.	
	<b>Examiner</b> MELLISSA M. CHOJNACKI	<b>Art Unit</b> 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Remarks**

1. In response to communications filed on April 11, 2008, no claims are cancelled; claims 1, and 17 have been amended, and no new claims have been added. Therefore, claims 1-21 are still presently pending in the application.

### ***Claim Objections***

2. Claims 1-21 are objected to because of the following informalities:  
  
Claims 1 and 17 disclose "utilising", which is misspelled. It should be spelled utilizing.  
  
Claims 2-16 and 18-21 are objected to because they are dependent upon objected independent claims 1 and 17.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lopresti et al. (U.S. Patent No. 5,832,474).

As to claim 1, Lopresti et al. teaches a method of improving accuracy in searching digital ink stored in a database accessible by a processing system (See abstract; column 3, lines 16-28), the method comprising:

receiving, as digital ink in the processing system the search input query having a specialized format, the specialized format having a unique text structure (See column 2, lines 43-59; column 3, lines 16-33);

determining, in the processing system, the unique text structure of the specialized format of digital ink (See column 3, lines 16-28, where “patterns” is read on “format”);

selecting a digital ink searching algorithm within the processing system which is specifically provides a search of the database for the determined unique text structure (See column 2, lines 60-67; column 3, lines 1-2, lines 16-28; column 13, lines 11-18); and,

searching the digital ink stored in a database for a match to the search input query by utilising the selected digital ink searching algorithm (See column 2, lines 60-67; column 3, lines 1-2, lines 16-28; column 13, lines 11-18); and

returning any matches to the search input query as a search result (See column 3, lines 16-28).

As to claim 2, Lopresti et al. teaches wherein the specialized format of digital ink is determined automatically, based on the digital ink to be searched (See column 3,

Art Unit: 2164

lines 16-28).

As to claim 3, Lopresti et al. teaches wherein the specialized format of digital ink is determined automatically, based on the search input query (See column 3, lines 16-28).

As to claim 4, Lopresti et al. teaches wherein the specialized format of digital ink is determined automatically, based on information contained in a document associated with the digital ink to be searched (See column 3, lines 16-28).

As to claim 5, Lopresti et al. teaches wherein the specialized format of digital ink is determined manually, by a user selecting the specialized format of digital ink (See column 3, lines 16-28).

As to claim 6, Lopresti et al. teaches wherein the specialized format of digital ink is determined manually, by a parameter associated with the system processing the digital ink (See column 3, lines 16-28, where “spatial and temporal components” is read on “parameter”).

As to claim 7, Lopresti et al. teaches wherein the specialized format of digital ink is determined automatically, based on a font contained in the document associated with

the digital ink to be searched (See column 3, lines 16-28; column 8, lines 13-61).

As to claim 8, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on a document label or document setting associated with the digital ink (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 9, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on a document field label associated with the digital ink (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 10, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on a document field attribute associated with the digital ink (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 11, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on an analysis of the characteristics of the digital ink to be searched (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 12, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on a written language or script of the digital ink to be searched (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 13, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on a written character set of the digital ink to be searched (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 14, Lopresti et al. teaches wherein the specialized format of digital ink is determined based on differentiating written text from drawings in the digital ink to be searched (See column 8, lines 13-61; column 11, lines 61-67).

As to claim 15, Lopresti et al. teaches wherein the search input query is of a type from the group of: textual; numerical; alphanumerical; pictorial; or graphical (See column 3, lines 16-28; column 8, lines 13-61; column 11, lines 61-67).

As to claim 16, Lopresti et al. teaches wherein an indicating label of the specialized format of digital ink is stored with the digital ink (See column 3, lines 16-28; column 8, lines 13-61; column 11, lines 61-67).

As to claim 17, Lopresti et al. teaches a system for improving accuracy in searching digital ink (See abstract), the system comprising:

(1) an input device to receive a search input query as digital ink having a specialized format, the specialized format having a unique text structure (See column 3, lines 16-33);

(2) a storage device to store the searchable digital ink (See column 4, lines 4-15);

(3) at least one processor in communication with the storage device (See column 4, lines 4-30), the at least one processor adapted to:

(A) determine the unique text structure of the specialized format of digital ink (See column 3, lines 16-28, where “patterns” is read on “format”);

(B) select a digital ink searching algorithm specifically provides a search of the database for the determined unique text structure (See column 2, lines 60-67; column 3, lines 1-2, lines 16-28; column 13, lines 11-18); and,

(C) search the digital ink for matches to the search input query by utilising the selected digital ink searching algorithm (See column 2, lines 60-67; column 3, lines 1-2, lines 16-28; column 13, lines 11-18); and, (4) an output device to display one or more search results (See column 7, lines 1-6).

As to claim 18, Lopresti et al. teaches wherein the input device is a pen-based input device (See abstract; column 1, lines 12-16).

As to claim 19, Lopresti et al. teaches wherein the input device is a keyboard or keypad (See column 1, lines 44-45).

As to claim 20, Lopresti et al. teaches wherein the output device is a printer or a visual display (See column 7, lines 1-6).



As to claim 21, Lopresti et al. teaches wherein the digital ink is associated with one or more of a document label, a document setting, a document field label or a document field attribute, and the specialized format of digital ink is determined from one or more of the document label, the document setting, the document field label or the document field attribute (See column 3, lines 16-28; column 8, lines 13-61; column 11, lines 61-67).

As to claim 22, Lopresti et al. teaches wherein the at least one processor determines the specialized format of digital ink based on user input to the input device (See column 3, lines 16-28; column 8, lines 13-61; column 11, lines 61-67).

As to claim 23, Lopresti et al. teaches the system as claimed in claim 17, the at least one processor adapted to perform the method of any one of the claims 1 to 16 (See column 4, lines 16-30).

### ***Response to Arguments***

5. Applicant's arguments filed on 18-February-2008, with respect to the rejected claims 1-21 have been fully considered but they are not found to be persuasive: In response to applicants' arguments regarding "***the subject matter of amended independent claims 1 and 17, and claims 2-16 and 18-23, is not disclosed or suggested by Lopresti, because Lopresti merely discloses converting ink data into strokes and then feature vectors, and searching a database of user-drawn***

***annotations for matches to feature vectors (see col. 8, lines 62-65) and does not teach or suggest determining unique text structures and selecting searching algorithms which specifically search a database for these unique text structures, as is required by the claimed invention***", the arguments have been fully considered but are not found to be persuasive, because Lopresti et al. disclosed a document search and retrieval system pertaining to annotations (See abstract; column 3, lines 3-28). Again the examiner would like to point out that "specialized format having a unique text structure" is not defined in the claim language nor could the examiner find what "unique text structure" is defined as in the Specification. These terms are very broad and Lopresti et al. does read on them. For example annotation can be searched in Lopresti et al. as part of document retrieval by capturing the "ink" strokes of the annotation and annotations are a textual format (See column 2, lines 19-35). Furthermore, Lopresti et al. annotations can be a "unique text structure". Lopresti et al. also uses several algorithms in order to search and match document retrieval (See column 2, lines 60-67) and again the claim language disclose a generic search algorithm. Considering the annotations are the "unique text structure" of Lopresti et al., then the search algorithm that is used by Lopresti et al. does in fact provide the search for the database as claimed.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The RCE filed on 11-April-2008 did not contain any new arguments regarding the amendments. After further consideration and examination, it is the Examiners belief that the amendments filed on 2/18/2008 do not overcome the prior art of record and therefore, the examiner maintains her rejection and responds to the applicants arguments above.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to Accuracy in Searching Digital Ink in general:

U.S. Patent Publication No. 20050154707 to Napper et al., for disclosing Electronic filing system searchable by a handwritten search query.

U.S. Patent Publication No. 2005/0222848 to Napper et al., for disclosing Digital Ink Database searching using handwriting feature synthesis.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELLISSA M. CHOJNACKI whose telephone number is (571)272-4076. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2164

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 30, 2008

Mmc

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164